

# TEST REPORT

Report No: SZ180410096EN

Report Date: 2018/4/17

Applicant: UTOP Electronic (Guangzhou) Co., Ltd.

Address: NO.51 Shi Nan Road Huijiang Village Dashi town Panyu area,Guangzhou city,china.

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client.

Sample Name UT MOLDING

Sample Received Date 2018.4.11

Testing Period 2018.4.11-2018.4.17

Test Requirement(s):

Test Item(s)	Test Standard(s)	Conclusion
1 Lead (Pb),Cadmium (Cd),Mercury (Hg) and Hexavalent Chromium (Cr(VI))	2011/65/EU	Pass
2 Polybrominated Biphenyls(PBBs) and PolybrominatedDipheny Ethers (PBDEs) Content	2011/65/EU	Pass
3 Phthalates content	2011/65/EU& (EU) 2015/863	Pass
4 Halogen test	IEC 61249-2-21:2003	Pass

\*\*\*\*\* For Further Details, Please Refer To the Following Page(s) \*\*\*\*\*

Approved by:



Joey Fan  
Vice General Manager

Shenzhen IMPAQ Testing Technology Co., Ltd



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1. Lead (Pb), Cadmium (Cd), Mercury (Hg) and Hexavalent Chromium (Cr(VI))

With reference to IEC 62321-4:2013/IEC 62321-5:2013/ IEC 62321: 2008, and analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES) and UV-Vis spectrophotometer

Test Item(s)	Result(s)	MDL	Limit
	001		
Lead(Pb)	N.D.	2.0	≤ 1000
Cadmium(Cd)	N.D.	2.0	≤ 100
Mercury(Hg)	N.D.	2.0	≤ 1000
Hexavalent Chromium(Cr(VI))	N.D.	2.0	≤ 1000

Note: The sample(s) had been digested totally tested for Lead, Cadmium, Mercury

- “MDL” denotes Method Detection Limit
- “N.D.” : denotes Not Detected (<MDL)
- “mg/kg” : denotes milligram per kilogram

2. Polybrominated Biphenyls (PBBs) and Polybrominated Diphenyl Ethers (PBDEs) Content

With reference to IEC 62321-6: 2015, and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

Test Item(s)	Result(s)	MDL	Limit
	001		
Monobromobiphenyl (1Br-PBB)	N.D.	5.0	--
Dibromobiphenyl (2Br-PBB)	N.D.	5.0	--
Tribromobiphenyl (3Br-PBB)	N.D.	5.0	--
Tetrabromobiphenyl (4Br-PBB)	N.D.	5.0	--
Pentabromobiphenyl (5Br-PBB)	N.D.	5.0	--
Hexabromobiphenyl (6Br-PBB)	N.D.	5.0	--
Heptabromobiphenyl (7Br-PBB)	N.D.	5.0	--
Octabromobiphenyl (8Br-PBB)	N.D.	5.0	--
Nonabromobiphenyl (9Br-PBB)	N.D.	5.0	--
Decabromobiphenyl (10Br-PBB)	N.D.	5.0	--
Sum of Polybrominated Biphenyls	N.D.	--	≤ 1000
Monobromodiphenyl ether (1Br-PBDE)	N.D.	5.0	--
Dibromodiphenyl ether (2Br-PBDE)	N.D.	5.0	--
Tribromodiphenyl ether (3Br-PBDE)	N.D.	5.0	--
Tetrabromodiphenyl ether (4Br-PBDE)	N.D.	5.0	--
Pentabromodiphenyl ether (5Br-PBDE)	N.D.	5.0	--
Hexabromodiphenyl ether (6Br-PBDE)	N.D.	5.0	--
Heptabromodiphenyl ether (7Br-PBDE)	N.D.	5.0	--
Octabromodiphenyl ether (8Br-PBDE)	N.D.	5.0	--
Nonabromodiphenyl ether (9Br-PBDE)	N.D.	5.0	--
Decabromodiphenyl ether (10Br-PBDE)	N.D.	5.0	--
Sum of Polybrominated Diphenyl Ethers	N.D.	--	≤ 1000

Note: - “MDL” denotes Method Detection Limit

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## 3. Phthalates content

### Phthalates Content

Test Item(s)	Result(s)	MDL	Limit
	001		
Di(2-ethylhexyl) phthalate (DEHP)	N.D.	0.005	≤ 0.1
Dibutyl phthalate (DBP)	N.D.	0.005	≤ 0.1
Benzyl butyl phthalate (BBP)	N.D.	0.005	≤ 0.1
Diisobutyl phthalate (DIBP)	N.D.	0.005	≤ 0.1

## 4. Halogen test

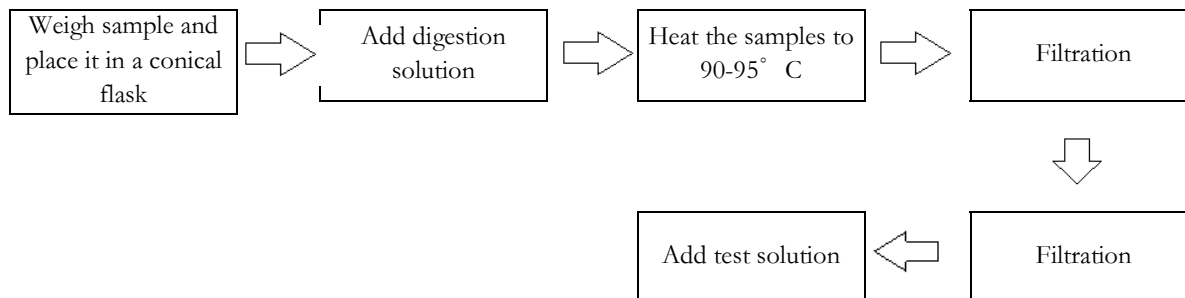
With reference to EN 14582:2016, Test Halogen (F, Cl, Br and I) Content

Test Item(s)	Result(s)	MDL	Limit
	001		
F	N.D.	50	---
Cl	N.D.	50	≤ 900
Br	N.D.	50	≤ 900
I	N.D.	50	---
Cl + Br	N.D.	---	≤ 1500

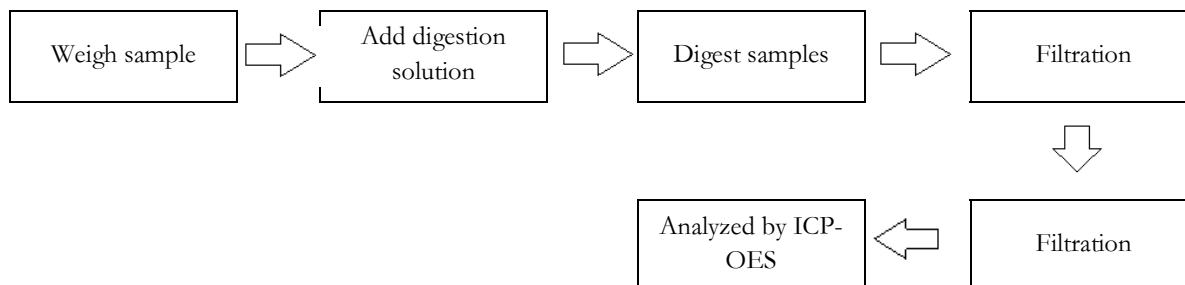
Note: - "MDL" denotes Method Detection Limit  
 - "N.D." : denotes Not Detected (<MDL)  
 - "mg/kg" : denotes milligram per kilogram

## Test Flow Chart

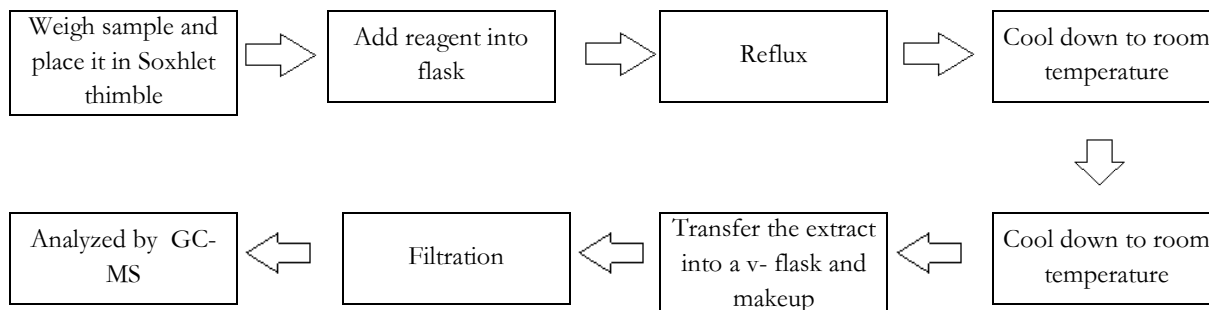
### Chromium(VI) Content



### Pb/Cd/Hg Content



### PBBs/PBDEs Content



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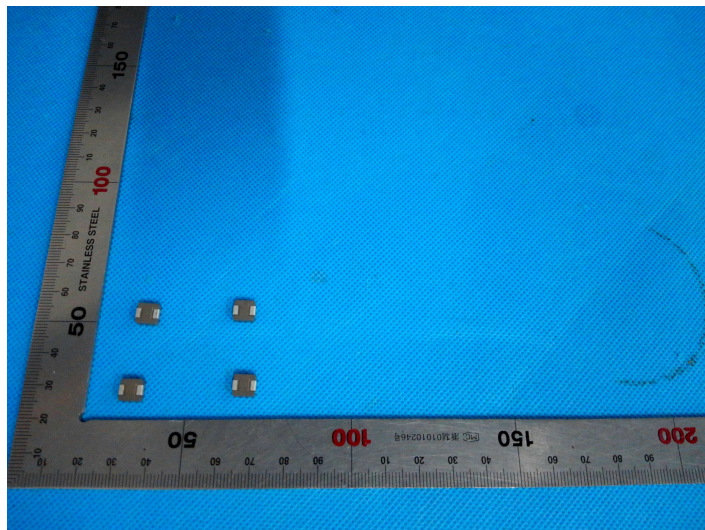
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Tested Sample/Part Description

Sample No.	Tested Material Description
001	UT MOLDING

Photo(s) of the sample(s)



\*\*\* End of Report \*\*\*

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